

NOTES AND MEMORANDA.

THE CENSUS AND HUMAN STOCKTAKING.

Members will be interested to read the text of a letter sent by our President to the Minister of Health on the importance of statistical data being obtained on national fertility, as distributed over the population and on mental and physical qualities of the nation:—

LETTER TO MINISTER OF HEALTH.

Sir,

In the name of my Council I beg leave to bring before you certain reasons why it seems to us highly desirable that the following four questions should be carefully considered by the Ministry of Health.

(a) The desirability of including in the Census of 1931 identically the same questions concerning the size, etc., of families, which were included in the Census of 1911, but not included in that of 1921.

■ (b) The consideration of improved methods of determining the degrees in which the different social classes are contributing to the make up of the nation as a whole.

(c) The establishment of some method of national stocktaking taken at periodical intervals, by means of which it would be possible in the future to determine whether the individuals composing the nation are increasing or decreasing in average value.

(d) The examination of the association between the differences in the mental and physical qualities of different individuals, and the differences both in their inborn qualities and in their environments.

The first of these questions (a) is the one which, we submit, is in need of most immediate attention, though it is perhaps not that of the greatest ultimate importance. Though the fact of the existence of a differential birth rate has been known for some thirty years, yet it is certain that the analysis of the returns of the Census of 1911 added greatly to the precision and reliability of our knowledge of this subject. The value of these investigations was, however, much diminished in consequence of there being no previous Census giving returns available for comparison in certain respects. If identically the same questions are included in the Census of 1931 we shall get invaluable information in regard to the *changes* in fertility now taking place amongst the different social strata.

As regards question (b) in order to ascertain the rates of population growth or decrease amongst the different social strata, not only fertility, but also the death rate, the age at marriage,

and the marriage rate must be taken into account. The problems involved are exceedingly complex and even if it has to be admitted that perfectly satisfactory replies in regard to this question are now unobtainable, this appears to us to be a poor reason for not attempting to arrive at as near an approximation to the truth as is possible. To erect a sign post pointing approximately in the right direction is better than to have no indication of the path to be pursued.

In reference to question (c) it should be noted that in the year 1904 an Inter-Departmental Committee on Physical Deterioration issued a valuable report, in which they recommended "that a permanent Anthropometric Survey should be organised as speedily as possible" (p. 84), whilst on the last page (93) they speak of the public awaiting "the necessary steps being taken to secure that body of well-sifted and accurate information, without which it is impossible to arrive at any conclusion of value as to the general problem" of physical deterioration." And this period of waiting in the dark has now lasted 23 years. Every commercial company takes stock of all its possessions every year, many millions of pounds being spent annually in England on this investigation. Men and women form far the most valuable asset of the nation, and surely it would be no less reasonable to expend even considerable sums on similar periodical enquiries in regard to the average value of our human stock. The Royal Anthropological Institute have often advocated an enquiry into *physical* qualities on the lines approved by the above mentioned Interdepartmental Committee, and if called on they would doubtless ably reiterate their plea. What we are urging, however, is that steps should be taken to ascertain the qualities, both mental and physical, of a random sample of the people say every ten or twenty years. It is very easy to point out possible sources of error in any such enquiry; but we are convinced that not only are such difficulties only to be gradually overcome by actually making an attempt in this direction, but that even imperfect information as to the changes in racial qualities which may now be taking place is likely to be useful in our present state of almost complete ignorance.

In any investigation of the above mentioned questions the existing expensive inefficient and overlapping systems of registration would probably be found to be a serious stumbling block in the path. If such an enquiry as we suggest should lead to the consolidation and simplification of existing systems of registration, this result alone would amply repay the labour involved in the enquiry.

If we neglect extreme types as being few in numbers, and if we look to the mass of the population, we see that the transfers now being made between the different social classes are largely dependent on mental qualities; for good abilities normally lead to good wages and to a step upwards on the social ladder. Moreover constant efforts are being made to make this sorting out process more effective, by means of additional educational facilities. Now the qualities which facilitate an upward or a downward

movement in the social scale are no doubt in some degree transferred from generation to generation, both by tradition and by natural inheritance. Hence the higher social strata are likely in the future to be differentiated from the lower strata both by superior natural abilities and by superior social traditions to a greater extent than is the case at present. In other words, if any change is now taking place in the average qualities of the people in consequence of a differential rate of multiplication, it is more likely to be in mental than in physical qualities. It may well be, therefore, that the Education Department is more closely concerned with some aspect of these questions than is the Ministry of Health. Though we have approached you in the first instance, we feel that without the cordial co-operation of both Departments, the best results could not be obtained; and we have, therefore, ventured to transmit a copy of the letter to the Education Department.

I should perhaps state that my Council has already approached the Medical Research Council with regard to question (c) or a national stocktaking. That body, however, decided after consideration that they could not take any action.

Question (d) namely that concerning the differentiation between inherited and acquired qualities, also remains to be considered, this being a problem which was added to the list in order to make up a logically complete series of enquiries. It is the only one of the four which could be investigated at all effectively without state aid, though such aid would be of great value. It is an exceedingly complex problem and all that I will here say is that it is not as vitally important a part of the whole enquiry as is sometimes represented. As regards certain problems it is the measurement of the changes in human qualities taking place from generation to generation, which would be of importance, rather than the ascertainment of the means of transmission. For example, if by means of a national stocktaking it should be proved that the percentage of children capable of adding up a small column of figures correctly had diminished since a previous stocktaking, we should then know that either in some way or other inferior powers were being passed on to the rising generation, or that the educational methods had deteriorated, and this would result in stimulating enquiries into both our educational systems and the factors affecting the natural endowments of the people. Nevertheless practical results of great importance would result from better powers of distinguishing inherited from traditional influences, which would in time well repay a considerable expenditure.

As much of what has been here said is based on the facts concerning the differential birth rate, may I conclude by saying that, even if no indisputable signs of racial deterioration can now be indicated, yet but little consolation can thus be derived. The differences in the birth rate have at all events been increasing greatly in recent years, and in Dr. Stevenson's words, "in the deficient fertility of the classes which, having achieved most success in life, are presumably best endowed with the qualifica-

tions for its achievement, we see that we have to face a new and formidable fact."

Though it is not for us to suggest how these different problems could best be approached by the Government, yet we cannot but venture to express the hope that our first suggestion (a) will be definitely accepted as a necessary complement to the enquiry instituted in the Census of 1911; and as regards the other more debatable points, possibly involving lengthy enquiry, that a small Interdepartmental Technical Committee will be appointed in order to report to the Departments concerned on these grave questions.

I have the honour to be,

Your obedient servant,

LEONARD DARWIN,

President.

MUSICAL ABILITY.

Through the kindness of Dean Inge the Society has been put in touch with the Rev. A. J. Parkes who supplies the following interesting family history showing the inheritance of musical ability.

Readers who have taken notice of Dr. Mjöen's work will perhaps make some attempt to get other English material together. It would be highly desirable eventually to make a detailed study in these families of the different factors involved but the necessary training for such work could hardly be undertaken on the basis of one or two pedigrees only.

It is hoped that the publication of this pedigree may interest people who can show the inheritance of traits other than musical (whether on the plus or minus side) to furnish us with accurate data.

John Hopkins
Musical, 'Cellist, CLASS II.

Tom Hopkins
Musical.
CLASS III.

William Hopkins
Musical.
Tenor singer.
CLASS III.

nn Hopkins
Musical.
Fine voice. ;
CLASS II.

William Foxon
CLASS IV.

Eliza Hopkins
Born 1816. Considerable personal charm. Magnificent soprano voice. Great musical gift. Appeared in Opera at St. James's Theatre under Braham. Sang at many concerts. Died 1881.
CLASS I.

David Parkes
= Born 1811. Died 1906. Professor
of Hebrew at Wesley College,
Sheffield. Definitely not musical.

John Foxon—Amelia Lovell.
Very musical. Musical.
CLASS III. CLASS III.

on Sam Fox
Musical.
CLASS III.

on Harry Fox
CLASS IV.

Marie H. Parkes
Born 1839. Brilliant
pianist. Pupil of Sir
Chas. Hallé. Performed
at Crystal Palace under
Herr Manns and else-
where. Died 1906.

John A. Parkes
Sang but by ear
only. Born 1841.

David Parkes
Born 1844.
Brilliant pianist.
Organ pupil of
Dr. S. S. Wesley.
Class I.

Rev'd. Alfred J. Parkes = Ada F. Day
Born 1862. Capable Musically
pianist. Has lectured gifted.
many times on musical CLASS II.
subjects. Interested in
Natural Science.
CLASS I.

**Ralph
Foxon
Rather
musical.
CLASS III.**

John Foxon	Very musical. Some time organist at Tinsley, Yorks., Parish Church. CLASS II.	Marle Foxon	Great musical gift. Professional. Honorary Associate R. Acad. of Music. Organizer of Concerts, &c. Vocalist. CLASS I.
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Mr. D. Foxon = Mary Moo
Great musical
gift.
Senior singer.
Pupil, Royal
Acad. of music.
Medallist.
CLASS I.

Frank Foxon
Musically gifted.
Bass voice.

Lily Foxon
Great musical gift
Brilliant

oxon
at gift.
ant CLASS III.

**Edith
Foxon
Musical.
CLASS III.**

Eliza M. Parkes
Fairly musical.
CLASS III.

George D. Parkes
B.Sc., M.A.
Oxon.
First class
Honour
School of
Natural
Science.
Musically
gifted.
CLASS II.

Children not musical

**Darrell H.
Foxon
Musical.
CLASS III.**

Sydney Foxon
Musically gifted.
(deceased).
CLASS II.

on Harland
d. Foxon
c. Fairly
musical.
CLASS III.

**Kathleen
M. Foxon**
Fairly
musical.
CLASS III.

**Flora
Foxon
Musical.
Vocalist.
Pianist.
CLASS II.**

Class I Great Musical gift. II Musically gifted. III Musical. IV Not musical.

EUGENIC CONSCIENCE.

The following might surely be taken as a sign of the times, and is a sample of the kind of appeal which reaches Eugenists:—

“The Encyclopaedia Britannica told me of the existence of the Eugenics Education Society. I am a single man, 22, but I will be one day a married man. Since long I am interested in improving our race, and should like to have healthy and strong children. I believe your works on Eugenics will be of a great interest to me. Will you be kind enough to let me know something about your Society and its work?” (*Portugal.*)

THE IMPROVEMENT OF WOOL BY TESTIS GRAFTS.

During the past few months there have been many references in the press to the work that is being carried out by Voronoff in Algeria with the object of improving the fleeces of sheep. The work of Voronoff in connection with rejuvenation by means of gonad grafts is too well known to need any further discussion here, but the application of his methods to sheep and the results that have been freely claimed are perhaps matters that merit comment in view of the general interest that has been aroused.

It is a fact that in the case of many sheep there is a considerable reduction with advancing age in the weight of the fleece, and it is perhaps to be expected that a successful rejuvenation effect would have the result of increasing the weight of fleece produced to nearly that of youth. This Voronoff claims to have effected, and he claims further that by means of gonad grafts it is possible to induce the growth of a fleece considerably finer and heavier than could ever be or ever was produced by the untreated male. A further claim is made, and that of the most startling kind, namely, that rams whose fleeces have been improved in this way transmit the improved fleece to their offspring.

In the present state of our knowledge the fleece of the sheep is a difficult subject for study, because scientific measurements that would make it possible to define accurately the differences between fleeces are for the most part lacking. It is difficult to measure a change in the character of a fleece or to define a reasonable degree of greater uniformity. For this reason, it will not be easy to define the precise effects of gonad grafting or any other treatment.

With regard to the larger claim that the excellence so produced is transmitted to the offspring, scientists will naturally be disposed to be sceptical unless the fullest proofs are forthcoming. It would be difficult to imagine a more clear-cut case of the inheritance of acquired characters.

It is understood that a British mission is shortly to visit Algeria in order to investigate fully the results of the experiments and it would be wise to preserve an open mind until this report is forthcoming. It can only be said that the clearest proof will be demanded both of the effect of the grafting and also the transmission of that effect in inheritance. Up to the present no scientific evidence has been presented that could be regarded as covering a fraction of the claims made in the daily

press, and it is most unfortunate that the results of experiments that promise to be of great interest should be broadcast in this way before the evidence is produced to a scientific audience. J.A.F.R.

THE GROWTH OF THE EUGENICS SOCIETY.

In the years 1923—26 the propaganda work of the Society doubled in each year. In 1924 there were twice as many meetings as in 1923, in 1925 twice as many as in 1924, and in 1926 twice as many as in 1925.

We appear now to have reached the limit of what we can do on our present income. Membership is still extremely low, only just over 600, though this represents a doubling in the last two and a half years. Our financial position is probably explained by the fact that the membership of the Society hitherto has been mainly amongst academic, scientific and professional people. We now wish to spread amongst men of affairs with a view to obtaining eugenic legislation and eugenic administrative changes.

The main and most encouraging form of propaganda at the moment is the provision of heredity exhibitions at Agricultural Shows, etc.

In the way of eugenic reform a certain amount is being quietly negotiated through Major Darwin, mainly—

(1) A movement is on foot to secure that the 1931 census corresponds with 1911 in showing the relative increase and decrease not only of the population as a whole, but of the different strata and classes.

(2) A bill is being drafted and we are attempting to secure support in the House for a measure prohibiting the marriage of defectives. The question of sterilisation legislation is being studied as a practical issue, with experts abroad, and legal advisers in this country.

(3) Resolutions will be introduced on this Finance Bill by a group of all three parties in the House, asking for further Income Tax relief for Income Taxpayers with families in respect of their children under (a) a rebate for each child, (b) exemption of taxation on education expenses, (c) exemption of taxation on maternity expenses.

WORK DONE.

The present allowances for Income Taxpayers' children are due to former efforts of the Society. The Mental Deficiency Acts of 1913 and 1927 were largely promoted and supported by eugenists in the House. The Eugenics Society is endeavouring to initiate a collection of figures at the Birth Control clinics, which should show what the effect of Birth Control really is amongst the working class and to what grade of unemployed and unemployables it can penetrate.

The Eugenics Society is in touch with social workers and scientists in the States and in Europe and at both the World Population Congress and the International Genetics Congress is pressing the importance for nations of the hereditary results which will follow the numerical decrease of the intelligent parts of each community. It is pushing for international data on Birth Control, it is pushing for careful study and legislation concerning migration, and it is calling attention to the dangers to world peace and to a high working class standard of living of over-population.